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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,977	10/28/2003	Chang-Woong Jeong	5000-1-383	4429
33942	7590	08/26/2005	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			KIM, SANG K	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,977	Applicant(s) JEONG ET AL.	
	Examiner SANG KIM	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-5 and 12-20 is/are rejected.
 7) ☒ Claim(s) 6-11 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bocciola, U.S. Patent No. 6305639 B1, in view of Grant, U.S. Patent No. 4997142.

With respect to claims 1, 12-15 and 20, Bocciola '639 shows a spool with first and second cylindrical barrels (2, 2), the barrels being axially engaged face-to-face at a juncture (near x-x); first and second flanges (3, 3) configured for restricting a winding area for the optical fiber by having a disk shape (i.e. a circular shape), being disposed to sandwich the barrels and being dimensioned to radially protrude from the barrels (2, 2); and splicing points (near x-x) formed along said juncture by welding; and a guide rib (11, i.e., radial fins can be used to fasten the end of the optical fiber to prevent any damage during winding) formed on outer surfaces of the first and second flanges, away from the juncture, as explained on column 5, lines 63-67, and see figure 1.

Grant '142 shows ultrasonic fusion splicing points (near 16-18) formed along said juncture by setting a head of an ultrasonic fusion finger (22) on one side of first and second cylindrical barrels and by transmitting an ultrasonic wave from the head to the juncture so as to fusion splice the first and second flanges together, see figure 1.

Bocciola '639 discloses the claimed invention except for an ultrasonic welding.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an ultrasonic welding as taught by Grant '142 since using an ultrasonic welding is well known and commonly practiced in the welding industry.

With respect to claims 2-3 and 16-17, as advanced above, Bocciola '639 does not show a zigzag pattern to engage the both ends together.

Grant '142 shows each of the first and second barrels has an end, wherein the ends engaging at the juncture with a zigzag pattern, see figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the ends of Bocciola '639 with a zigzag pattern as taught by Grant '142, in order to provide a better interlocking between both barrels.

With respect to claims 4-5 and 18-19, as advanced above, Bocciola '639 shows wherein at least one of the first and second flanges includes a through hole (12) for the passing the star end of the optical fiber, see figure 2.

Allowable Subject Matter

Claims 6-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Claims 1, 2, 6, 15 and 16 have been amended.

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Applicant's amended claims reciting "a guide rib formed on outer surfaces of the first and second flanges, away from the juncture," with respect to claims 1 and 15 have been fully considered and are persuasive with respect to claims 1-3, 12-17 and 20 as being anticipated by Grant '142. The rejection of Grant '142 has been withdrawn.

However, Applicant's remarks filed on 6/27/05 have been fully considered but they are not persuasive with respect to claims 1-5 and 12-20, Bocciola '639, in view of Grant '142.

Applicant states that Bocciola does not teach or show the guide rib. As stated above, Bocciola '639 shows a guide rib (11, i.e., radial fins can be used to fasten the end of the optical fiber to prevent any damage during winding) formed on outer surfaces of the first and second flanges, away from the juncture, as explained on column 5, lines 63-67.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 571-272-6947. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

8/15/05



KATHY MATECKI
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